



Position Description – Research Fellow (C2IMPRESS)

Position Details

Position Title:	Research Fellow (C2IMPRESS project)
Position Number:	NEW
College/Portfolio:	Global Portfolio
School/Group:	RMIT Europe
Campus Location:	Based at RMIT Europe in Barcelona (Spain), travel may be required
Classification:	Academic Level B
Time Fraction:	FTE 1.0 (37 hours per week)
Salary:	40,000 euros (gross annual salary, negotiable based on experience)

RMIT University

RMIT is a leading multi-sector university of technology, design and enterprise with more than 91,000 students and 11,000 staff globally. We offer postgraduate, undergraduate, vocational education and online programs to provide students with a variety of work-relevant pathways.

Our purpose is to offer life-changing experiences for our students, and to help shape the world with research, innovation, teaching and industry engagement. With strong industry connections forged over 130 years, collaboration with industry remains integral to RMIT's leadership in education, applied and innovative research, and to the development of highly skilled, globally-focused graduates.

With three campuses in Melbourne (Central Business District, Brunswick and Bundoora), two in Vietnam (Hanoi and Ho Chi Minh City) and a centre in Barcelona, Spain, RMIT is a truly global university. RMIT also offers programs through partners in Singapore, Hong Kong, mainland China, Indonesia, Sri Lanka, Belgium, Germany, Austria and The Netherlands, and enjoys research and industry partnerships on every continent.

We are also committed to redefining our relationship in working with and supporting Aboriginal self-determination. Our goal is to achieve lasting transformation by maturing our values, culture, policy and structures in a way that embeds reconciliation in everything we do. We are changing our ways of knowing, working and being to support sustainable reconciliation and activate a relationship between Indigenous

and non-Indigenous staff, students and community. Our three campuses in Melbourne (City, Brunswick and Bundoora campuses) are located on the unceded lands of the people of the Woi Wurrung and Boon Wurrung language groups of the eastern Kulin Nation

We're proud to share with you:

- The launch of our second [Reconciliation Plan for Dhumbah Goorowa– a “commitment to share” - an important step in our reconciliation journey.](#)
- RMIT University is an **Athena SWAN** member with Bronze Award accreditation and the College of Science, Engineering and Health is central to driving improvements in gender equality, diversity and inclusion, particularly in the Science, Technology, Engineering, Mathematics and Medicine (STEMM) disciplines.
- RMIT was placed **10th in the 2019 Randstad Employer Brand Research Awards**, up five spots from 2018.
- We were named as an **Employer of Choice for Gender Equality** by the Workplace Gender Equality Agency three years in a row!
- We achieved **Gold Employer status for LGBTIQ** inclusion in the Australian Workplace Equality Index (AWEI) in 2018, 2019 and 2020.
- We were recognised as a **top five employer in 2018 for workplace accessibility** by the Australian Network on Disability and awarded with **Disability Confident Recruiter Accreditation** in 2020.
- In 2020, RMIT University has become the first Australian institution to receive the **HR Excellence in Research Award**, recognized by the European Commission.

RMIT Standings in university rankings

We are ranked **#1 in the world** for our efforts to reduce inequality in the Times Higher Education (THE) Impact Rankings 2020.

RMIT has a deep commitment to innovation, research and teaching, we are a 5-Star university under the QS Stars international evaluation system and are **223rd globally in QS World University Rankings 2021** (moved up 15 places compared to 238th last year), being also 18th in the world among universities less than 50 years old (2014 QS Top 50 Under 50 index). Additionally:

- In the 2020 QS World University Rankings by Subject, RMIT was positioned 11th in the world (highest ranked in Australia) in Art and Design, 22nd in the world (fourth highest in Australia) in Architecture and the Built Environment, and 37th in Media and Communications. We are also among the world's top 100 universities in Engineering (Civil and Structural; Electrical and Electronic; and Mechanical, Mechanical, Aeronautical and Manufacturing); Accounting and Finance; and Business and Management Studies).
- In the 2020 QS Rankings by Subject, RMIT was ranked 11th in the world and number one in the Asia Pacific for Art and Design, and 26th in Architecture and the Built Environment. RMIT is also among the world's top 100 universities in Engineering (Civil and Structural; Electrical and Electronic; and Computer Science and Information Systems); Accounting and Finance; Business and Management Studies; and Communication and Media Studies. The 2018 Shanghai Ranking's Global Ranking of Academic Subjects highlighted RMIT's strength in Engineering and Technology in particular.
- In the specialised rankings, RMIT is ranked 77th in the QS Graduate Employability Rankings 2020 and 82nd in the inaugural Times Higher Education University Impact Rankings 2019.
- RMIT has moved up 51 places in the 2021 Times Higher Education World University Rankings, strengthening its reputation as a leading global university. The University has leapt more than 150 places since 2015 and is now ranked in the **top 301-350 band**.
- RMIT continued its strong performance in the 2020 CWTS Leiden Ranking, which ranks the world's top research-intensive universities, moving up 21 places to be ranked **293rd globally** on

proportion of international publications, and **ranking 225th** on proportion of top 5% publications, up 120 places from 2019.

For more information, visit www.rmit.edu.au/about

Global Portfolio

The Global team supports RMIT's efforts to build international partnerships, manages RMIT's offshore delivery partners, and supports the University's offshore business development activities. It provides expert support, guidance and services to University staff and education partners on a range of international partnership activities. Global has a strong focus on converting opportunities and relationships into firm outcomes and deliverables for the University.

The portfolio works closely with colleagues across RMIT and with partner institutions and organisations across the world in an effort to:

- Lead and contribute to the development of new international partnerships and growth agendas
- Manage and oversee international partnerships and collaborations
- Provide expert support and services to University staff and education partners on a range of international partnership activities

RMIT Europe

RMIT Europe, is a creative and dynamic hub of RMIT university based in the heart of Barcelona. It is a centre that is successfully extending RMIT University's international engagement in Europe and strategically growing the university's collaborative research and education activity in Europe. RMIT Europe is led by the Executive Director on behalf of the RMIT Europe Board. It facilitates RMIT's collaboration in the development of innovative pan-European projects attracting global knowledge from Europe, Australia and Asia to deliver local impact.

The objectives for RMIT Europe are to:

- Strengthen RMIT's reputation and profile in Europe and globally
- Increase research funding and activity, with a focus on European partnerships and funding sources
- Develop collaborative opportunities for education with European partners
- Strategically focus RMIT international experiences for staff and students with European partners and grow opportunities for RMIT students
- Leverage and grow industry partnerships to support the quality and relevance of our education and to ensure the impact of our research

Position Summary

The Research Fellow will work based at RMIT Europe and the primary focus will be to deliver on RMIT Europe's objectives under the Horizon Europe project C2IMPRESS (Co-creative Improved Understanding and Awareness of Multi-hazard Risks for Disaster Resilient), for which RMIT Europe will lead two tasks and contribute to the implementation of the work packages.

The C2IMPRESS project aims to bring a radical paradigm shift to disaster and hazard research and innovation by moving away from traditional 'hazard centric' approach/ framework to a novel 'place and people' centred integrated multi-hazard risk and resilient assessment framework. Guided by this framework, the C2IMPRESS project aims to offer an ensemble of innovative revolutionary models, methods, frameworks, tools and technologies that are holistic and robust enough to provide appropriate fine-grained spatio-temporal qualitative and quantitative data, locally appropriate solutions, better prediction with lower uncertainty on risks of single or multiple hazards stemming from extreme weather events like floods, wildfires etc. under different climate change scenarios.

RMIT Europe (under the coordination of RMIT University, Australia) will develop an agent-based model (ABM) of community response to a modelled hazard, or sequence of hazards. This will incorporate cognitive reasoning based on the Human Behaviour Model (HBM) and include a novel traffic model to capture the mobility of the affected population, as well as a decision model to inject a proposed hazard response by the authorities. The ABM will use existing open-source software that has been developed at RMIT which include unique algorithms to build a detailed routable road network for city-scale simulations and synthetic populations based on census and seasonal tourism. Likewise, RMIT will work with C2IMPRESS consortium partners to develop international exposure of the project results and thus reaching beyond the EU will be achieved.

Reporting Line

Reports to:

- Dr Dharendra Singh, Principal Research Fellow, School of Computing Technologies (RMIT Australia)
- Clara Caminal, Senior Manager EU Project Officer (RMIT Europe) for day-to-day operational and stakeholder engagement activities

Direct reports: Nil.

Organisational Accountabilities

RMIT University is committed to the health, safety and wellbeing of its staff. RMIT and its staff must comply with a range of statutory requirements, including equal opportunity, occupational health and safety, privacy and trade practice. RMIT also expects staff to comply with its policy and procedures, which relate to statutory requirements and our ways of working.

Appointees are accountable for completing training on these matters and ensuring their knowledge and the knowledge of their staff is up to date.

Key Accountabilities

As directed by the C2IMPRESS academic lead and in consultation with the project coordinator and other relevant partners:

- Assume responsibility for day-to-day oversight of C2IMPRESS project implementation, delivery, management, and reporting
- Prepare documentation and materials around coordination, governance, and management of the project, and progress reports.
- Liaise with project partners including the lead for all project deliverables and reporting.
- Develop a human behaviour model (HBM) based on cognitive reasoning tailored to local data on socio-demographics, socio-cultural factors, hazard experiences and perceptions.
- Build a cutting-edge agent-based model (ABM) combining the HBM with multi- and mixed- travel modes (e.g., by car, on foot) for large scale evacuation simulations.
- Develop a decision model to inject proposed hazard responses by the authorities.
- Create a set of evacuation scenarios co-produced with stakeholders to improve understanding of community risks in different natural hazard settings for targeted sites.
- Collate results of project activities and assist in the preparation of project deliverables and publications within agreed timeframes.
- Communicate C2IMPRESS research outcomes to other team members, clients and the broader research community internal and external to RMIT University, through high quality papers/journal articles, seminars, and conference attendance.

As directed by the Senior Manager, EU Project Office:

- Contribute to the efficient delivery of all the required technical deliverables and reports in due time.
- Contribute to the development of grant applications building one's own area of expertise and the experiences and knowledge generated through the project
- Participate in annual work planning and performance management processes.

- Perform other duties that may be required for the efficient operations of the RMIT Europe team.

Key Selection Criteria

- Experience in human behaviour modelling or agent reasoning (preferably for natural hazards).
- Demonstrated proficiency in programming languages (preferably Java and C++).
- Demonstrated ability to clearly communicate research concepts and results in high-quality research outlets, in grant applications, and to research stakeholders.
- Demonstrated project management skills, and ability to deliver project outcomes on time.
- Demonstrated critical thinking and problem-solving skills in multi-disciplinary research teams.

Applicants should include a response to each Key Selection Criteria with their application.

Qualifications

- A PhD in Computer Science or a related discipline
- High level proficiency in English (essential) and Spanish (beneficial)
- Eligibility to work legally in Spain

Endorsed:	Signature: Name: Title: Date:	Approved:	Signature: Name: Title: Date:
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